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### (54) Method and system for controlling the photolithography process

(57) A method and a system are presented for automatic optical control of at least one working parameter of a processing tool (3) to be applied to a working area of a workpiece (W) for providing certain process results. The at least one working parameter of the processing tool affects at least one parameter of the workpiece under processing. The processing tool has a preset value of the at least one working parameter prior to the processing of the workpiece. A measuring tool (14) is applied to the workpiece prior to its processing by the processing tool for measuring the at least one parameter of the workpiece and generating measured data representative thereof. The measured data is analyzed with respect to the preset value of the working parameter and to the process results, so as to determine whether the preset value should be corrected for providing the certain process results when applying the processing tool to said workpiece. Upon detecting that the preset value should be corrected, calculating a correction value.

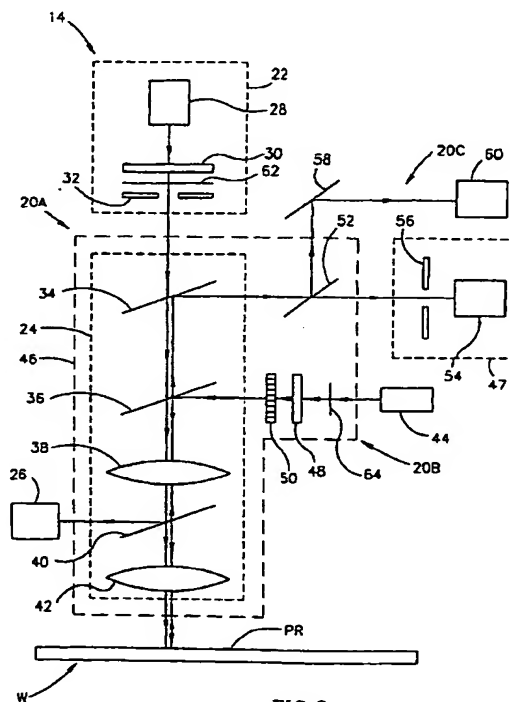


FIG. 3

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# EUROPEAN SEARCH REPORT

Application Number  
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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)		
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TECHNICAL FIELDS SEARCHED (Int.Cl.7)					
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The present search report has been drawn up for all claims					
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>5 April 2001</b>	Examiner <b>Heryet, C</b>		
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... &amp; : member of the same patent family, corresponding document</p>					

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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